

## **RETROREFLECTIVE AREA SENSORS**





### **BECAUSE OBJECTS COME IN ALL SHAPES AND SIZES**

RLG28 series retroreflective area sensors are used to detect objects, especially their leading edges, regardless of position, shape, or texture. They offer a simple, fast, affordable, and consistent way to sense compared to a thru-beam light grid or multiple single-beam sensors.

Retroreflective area sensors contain multiple transmitter and receiver elements in one housing aimed at a reflector, resulting in a continuous height or width detection field over the entire distance from the sensor to the reflector. When the light beam is obstructed, the sensor's output changes state.



#### BENEFITS

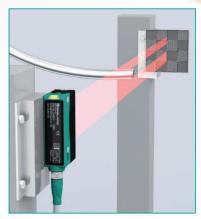
- More detection coverage than single-beam sensors
- More cost-effective than a thru-beam light grid or an array of single-beam sensors
- Reliable detection of objects regardless of shape, position, or surface
- Constant resolution over entire sensing range and detection field
- Low temperature operation down to -30 °C (-22 °F)
- **Exclusive 4-in-1**<sup>TM</sup> output technology to reduce inventory costs
- Built-in cross-talk protection
- Mounts and wires same as single-beam sensors
- Highly visible transmitter LEDs for alignment ease
- Bright, enhanced function LEDs indicate sensor status

#### TYPICAL APPLICATIONS

- Leading edge detection of various pallet types
- Overhang control (detection of pallet protrusion)
- Detection of irregular or undefined edges (bags)
- Sense objects with variable positions (board bouncing along conveyor)
- Detection of objects with changing shapes or heights (pouches)
- Verify presence of objects with changing texture (wrapped cases, soiled trays)
- Ejection control (sensing falling objects)
- Muting function for use with safety light curtains

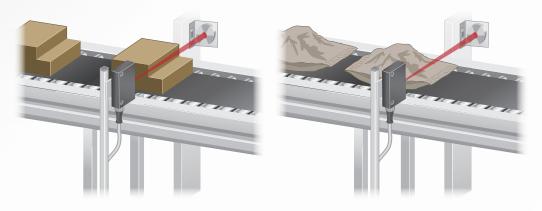


RLG28 detects the true leading edges of objects, such as a stack of newspapers, even if the edge is inconsistent.



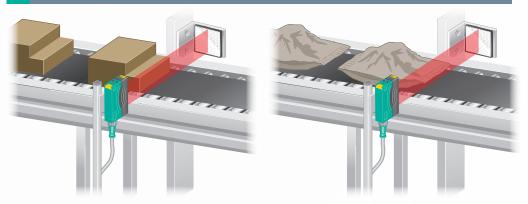
Objects with round surfaces that may be positioned differently, such as a curved rod, are sensed repeatedly.

#### **SINGLE-BEAM SENSOR**



While single-beam sensors (top) can detect a passing object's leading edge at different points based on where the light spot is positioned, RLG28 retroreflective area sensors (right) consistently monitor the true leading edge of objects.

#### RETROREFLECTIVE AREA SENSOR







| Model Number           | RLG28-55/40a/73c/136              | RLG28-55/40a/115b/136          |
|------------------------|-----------------------------------|--------------------------------|
| Sensing Range          | 0 m - 4 m                         |                                |
| Reflector Distance     | 0.2 m - 4 m                       |                                |
| Resolution             | 12 mm across entire sensing range |                                |
| <b>Detection Field</b> | 60 mm across entire sensing range |                                |
| Output                 | 4-in-1™                           |                                |
| Connection             | Integral M12 quick-disconnect     | Pigtailed M12 quick-disconnect |

# FACTORY AUTOMATION – SENSING YOUR NEEDS



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